

Remarks

In a non-final Office Action dated August 28, 2006, claims 25-28 and 30-34 were rejected as being unpatentable under 35 U.S.C. § 103 over U.S. Patent No. 5,566,045 to Summerfelt et al in view of U.S. Patent No. 5,254,217 to Maniar et al. Claims 36-45 were deemed allowable over the art of record.

In response, applicant has amended independent claims 25 and 30. Claims 25-28, and 30-45 remain pending for consideration.

In his rejection of claims 25-28 and 30-34, the examiner notes that Maniar et al., suggest the generic over-etching of a substrate surface during the fabrication of a capacitor structure. (See, Maniar et al. at Col. 6, lines 26-36).

Applicant respectfully submits that the examiner's interpretation of this disclosure is considerably too broad. Maniar et al. make it very clear that only the laterally disposed portions of the lower RuO₂ layer (forming bottom plate 50) disposed on the surface of the substrate are "over-etched." As the examiner well understands, etching (or over-etching) in this context is a question of materials not just location. While Maniar et al. specifically "remove all portions of the first RuO₂ layer", the invention recited in claim 1 over-etches the actual material of the lower substrate. (Note further in this regard, Maniar et al. at Col. 6, lines 35-38).

To further highlight this distinction, applicant has amended claims 25 and 30 to recite in combination, "wherein the lower substrate exposed by third layer is overetched to form a step in an upper surface of the lower substrate." This "step in the upper surface of the lower substrate" is clearly disclosed in the example embodiment of the invention illustrated in FIG. 7 of the subject application. Such a step can only be formed by the actual removal of some portion of the material forming the lower substrate by over etching. Maniar et al. taken alone or in combination with Summerfelt et al can not be said to disclose or suggest this aspect of the invention recited in amended claims 25 and 30.

Applicant therefore submits that all of the pending claims distinguish over the art of record and are in condition for allowance.

Respectfully submitted,
Volentine, Francos & Whitt, PLLC



Stephen R. Whitt
Reg. No. 34,753

Date: November 28, 2006

Volentine, Francos & Whitt, PLLC
One Freedom Square
11951 Freedom Drive, Suite 1260
Reston VA 20190

Tel. 571.283.0720
Fax 571.283.0740